

1/7

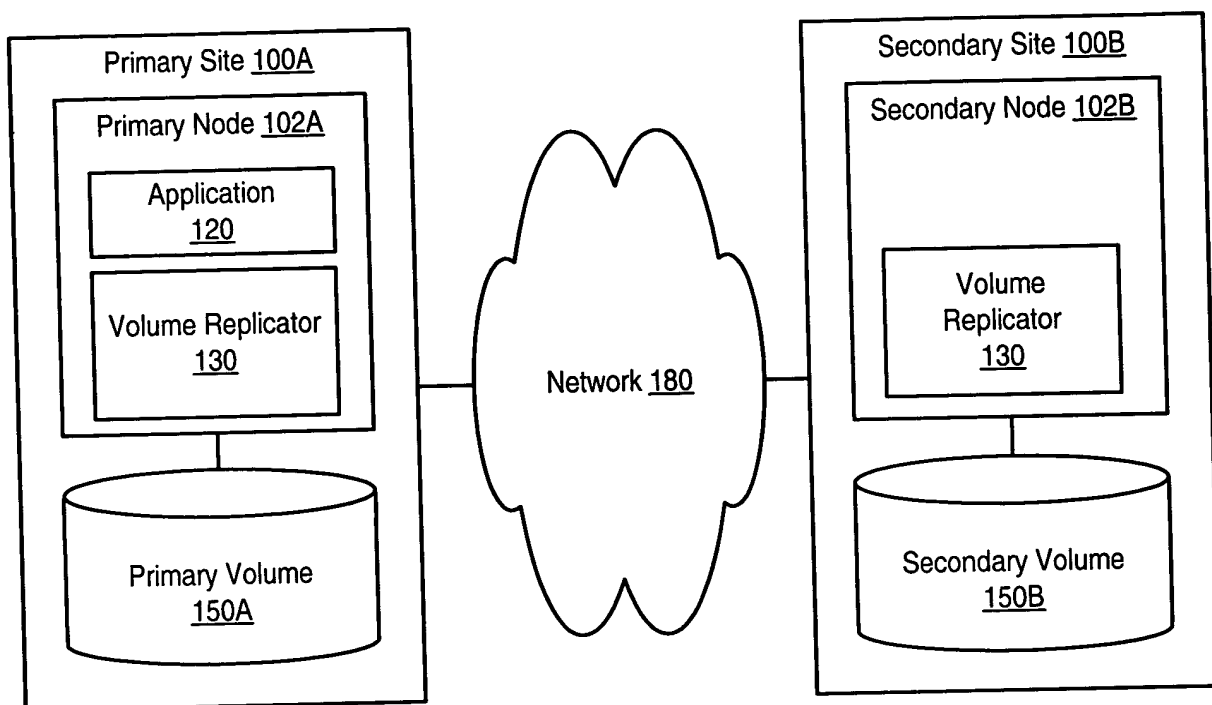


FIG. 1

2/7

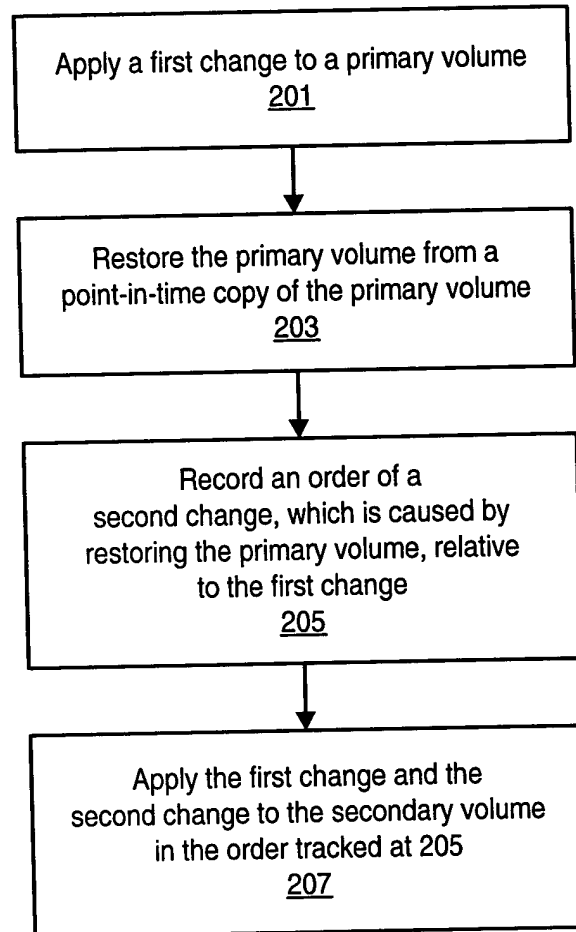


FIG. 2

3/7

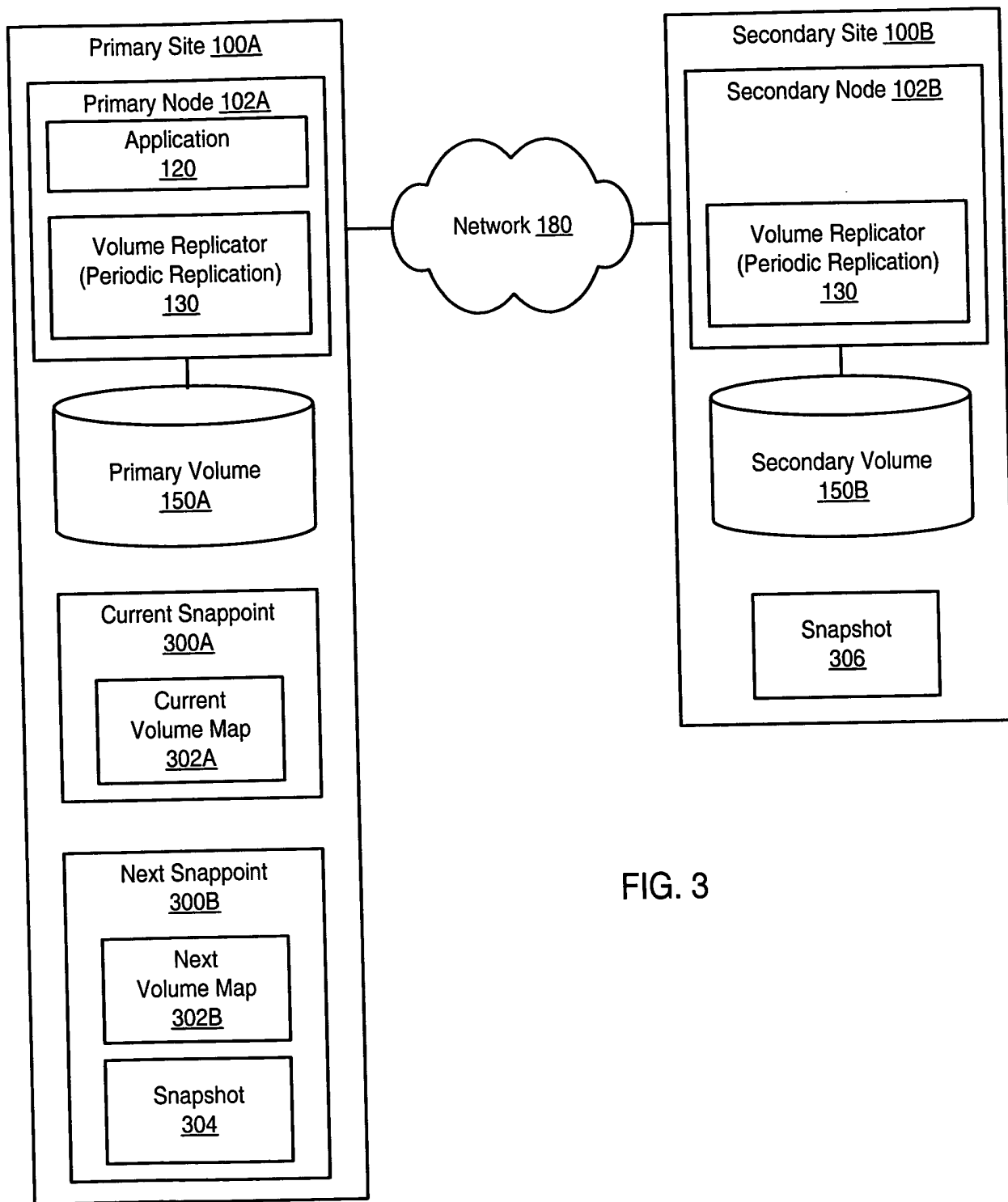


FIG. 3

4/7

T = T₀

Primary Volume 150A	
A0	Region A
B0	Region B
C0	Region C
D0	Region D

FIG. 4A

T = T1	<div>Primary Volume 150A</div> <table><tr><td>A1</td></tr><tr><td>B1 > B2</td></tr><tr><td>C0</td></tr><tr><td>D1</td></tr></table>	A1	B1 > B2	C0	D1		<div>Next Volume Map 302B</div> <table><tr><td>0</td></tr><tr><td>1</td></tr><tr><td>0</td></tr><tr><td>0</td></tr></table>	0	1	0	0	<div>COW Snapshot 304</div> <table><tr><td></td></tr><tr><td>B1</td></tr><tr><td></td></tr><tr><td></td></tr></table>		B1			<div>Secondary Volume 150B</div> <table><tr><td>A1</td></tr><tr><td>B1</td></tr><tr><td>C0</td></tr><tr><td>D1</td></tr></table>	A1	B1	C0	D1				
A1																									
B1 > B2																									
C0																									
D1																									
0																									
1																									
0																									
0																									
B1																									
A1																									
B1																									
C0																									
D1																									
T = T2	<div>Primary Volume 150A</div> <table><tr><td>A1</td></tr><tr><td>B2</td></tr><tr><td>C0</td></tr><tr><td>D1</td></tr></table>	A1	B2	C0	D1	<div>Current Volume Map 302A</div> <table><tr><td>0</td></tr><tr><td>1</td></tr><tr><td>0</td></tr><tr><td>0</td></tr></table>	0	1	0	0	<div>Next Volume Map 302B</div> <table><tr><td>0</td></tr><tr><td>0</td></tr><tr><td>0</td></tr><tr><td>0</td></tr></table>	0	0	0	0	<div>COW Snapshot 304</div> <table><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table>					<div>Secondary Volume 150B</div> <table><tr><td>A1</td></tr><tr><td>B1 > B2</td></tr><tr><td>C0</td></tr><tr><td>D1</td></tr></table>	A1	B1 > B2	C0	D1
A1																									
B2																									
C0																									
D1																									
0																									
1																									
0																									
0																									
0																									
0																									
0																									
0																									
A1																									
B1 > B2																									
C0																									
D1																									
T = T3	<div>Primary Volume 150A</div> <table><tr><td>A1 > A0</td></tr><tr><td>B2 > B0</td></tr><tr><td>C0</td></tr><tr><td>D1 > D0</td></tr></table>	A1 > A0	B2 > B0	C0	D1 > D0	<div>Current Volume Map 302A</div> <table><tr><td>0</td></tr><tr><td>1</td></tr><tr><td>0</td></tr><tr><td>0</td></tr></table>	0	1	0	0	<div>Next Volume Map 302B</div> <table><tr><td>1</td></tr><tr><td>1</td></tr><tr><td>0</td></tr><tr><td>1</td></tr></table>	1	1	0	1	<div>COW Snapshot 304</div> <table><tr><td>A1</td></tr><tr><td>B2</td></tr><tr><td></td></tr><tr><td>D1</td></tr></table>	A1	B2		D1	<div>Secondary Volume 150B</div> <table><tr><td>A1</td></tr><tr><td>B2</td></tr><tr><td>C0</td></tr><tr><td>D1</td></tr></table>	A1	B2	C0	D1
A1 > A0																									
B2 > B0																									
C0																									
D1 > D0																									
0																									
1																									
0																									
0																									
1																									
1																									
0																									
1																									
A1																									
B2																									
D1																									
A1																									
B2																									
C0																									
D1																									

5/7

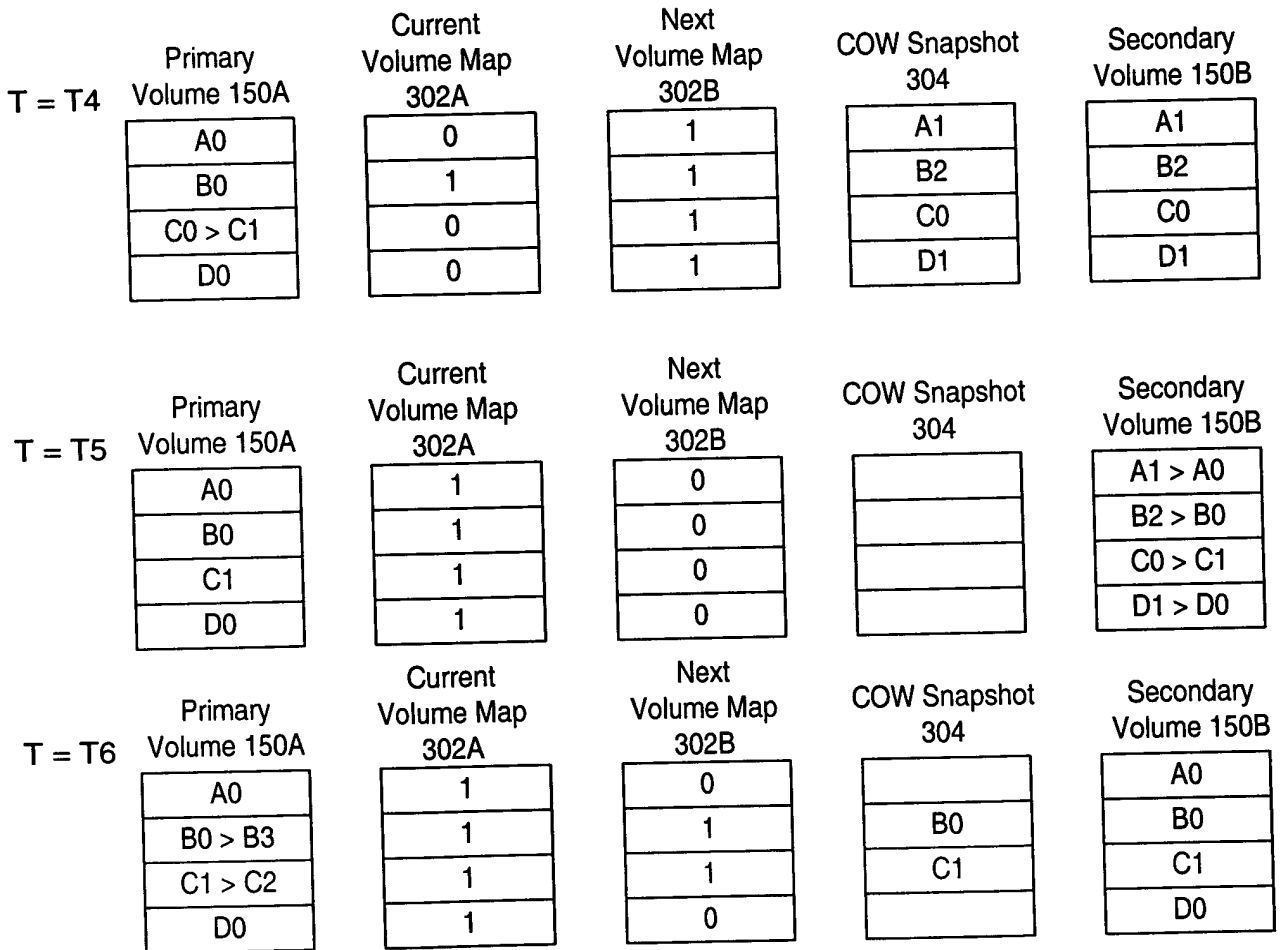


FIG. 4B

6/7

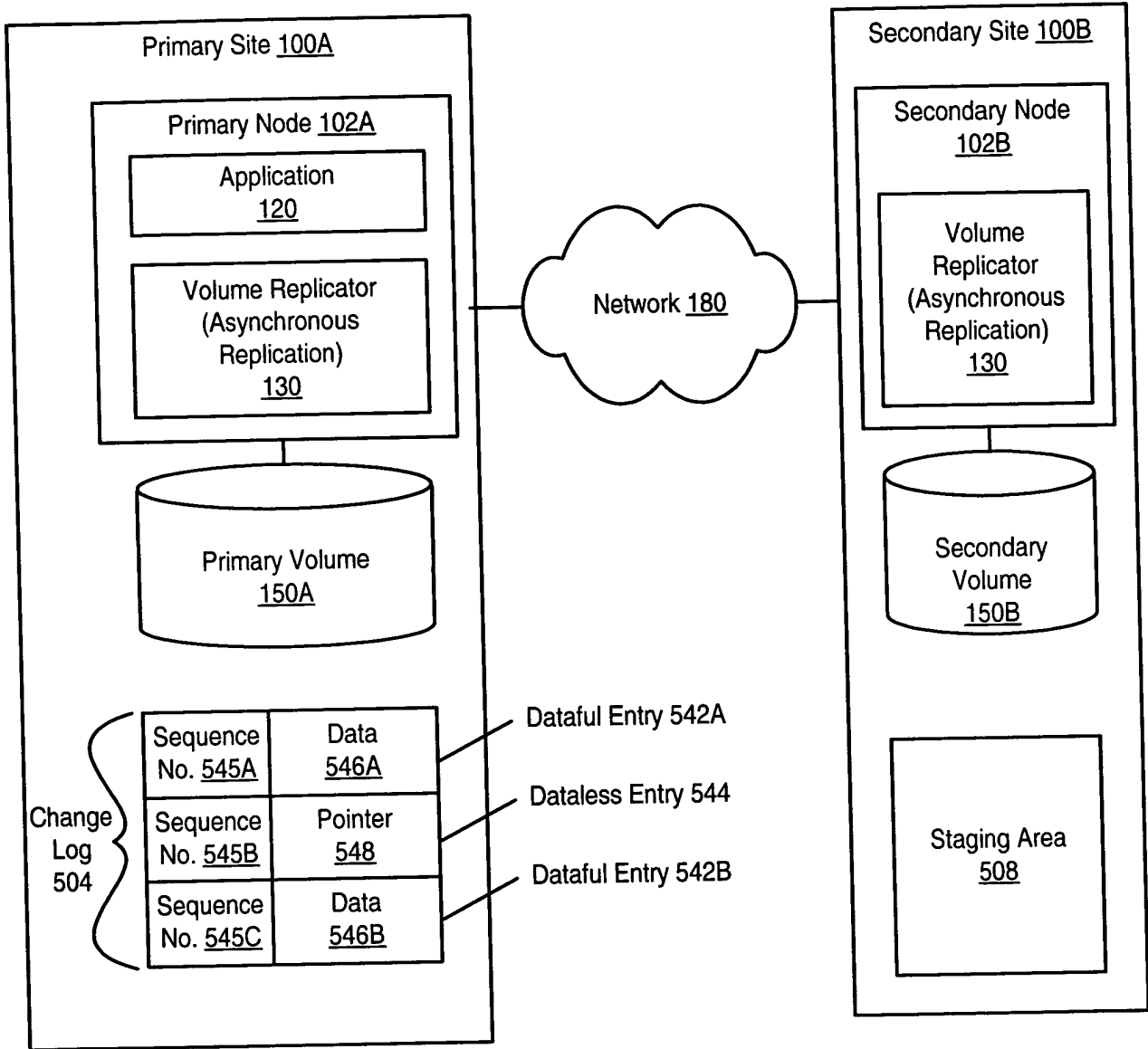


FIG. 5

7/7

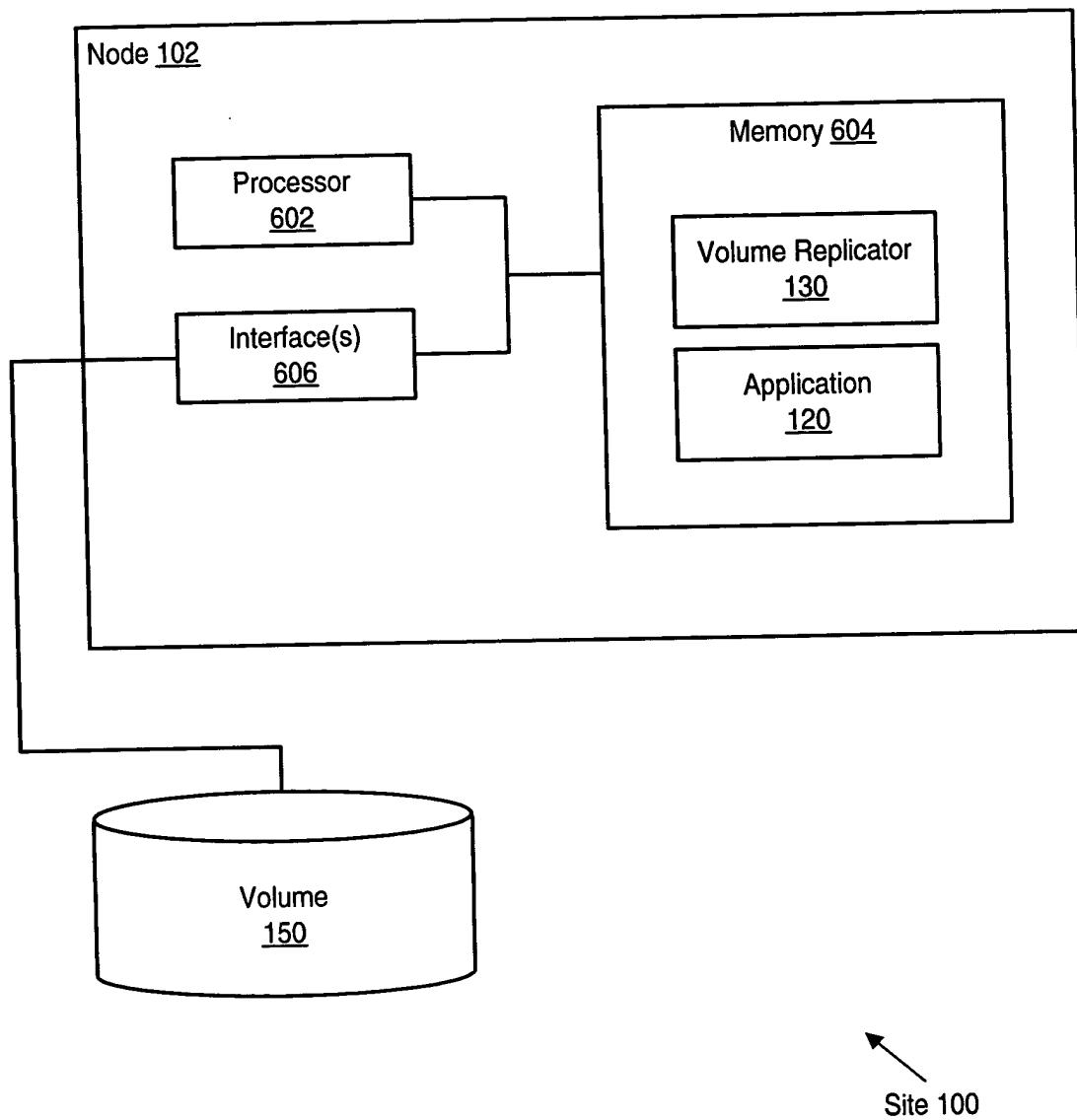


FIG. 6